Application No.: TBA Docket No.: HO-P02682US1

COMPLETE LISTING OF CLAIMS

IN ASCENDING ORDER WITH STATUS INDICATOR

Claims 1-23 (Canceled)

24. (Currently Amended) A process for producing lactoferrin which comprises culturing a transformant eucaryotic cell containing a recombinant plasmid, said plasmid comprising a plasmic vector having a polydeoxyribonucleotide which codes for a lactoferrin proteins in a suitable nutrient medium until the lactoferrin protein is formed and isolating the human-lactoferrin protein.

Claims 25-29 (Canceled)

30. (Currently Amended) A method for producing biologically active recombinant lactoferrin comprising the steps of:

combining sequences containing a selectable marker gene, a promotor, a transcription termination sequence, and a linker sequence;

cloning said sequences to form a plasmid;

digesting said plasmid with a restriction endonuclease;

inserting a cDNA coding for human, bovine or porcine lactoferrin into a restriction site; and

transforming <u>a cells</u> with said plasmid and the cell expressing to produce said recombinant lactoferrin eDNA.

- 31. (Original) The method of Claim 30, wherein said selectable marker gene is selected from the group consisting of pryr4, pyrG, andS, argB and trpC.
 - 32. Canceled
- 33. (Original) The method of Claim 30, wherein said promotor is selected from the group consisting of alcohol dehydrogenase, argB, α -amylase, glucoamylase, alcohol dehydrogenase and benA.

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34. (Origianl) The method of Claim 30, wherein said transcription termination sequence is selected from the group consisting of α -amylase, glucoamylase, alcohol dehydrogenase and benA.

35. (Original) The method of Claim 30, wherein said linker sequence is selected from the group consisting of α -amylase, glucoamylase and lactoferrin.

Claims 36-57 (Canceled)

58. (Currently Amended) A method for producing biologically active recombinant lactoferrin comprising the steps of:

combining sequences containing a selectable marker gene, a promotor, a transcription termination sequence, and a linker sequence;

cloning said sequences to form a plasmid;

digesting said plasmid with a restriction endocnuclease;

inserting a substitution analog of a cDNA sequence selected from the group consisting of SEQ. ID No. 1, 3, and 5 into a restriction site; and transforming eucaryotic cells with said plasmid expressing lactoferrin cDNA which produces said recombinant lactoferrin.

- 59. The method of Claim 58, wherein said selectable marker gene is selected from the group consisting of pyr4, pyrG, andS, argB and trpC.
 - 60. Canceled
- 61. (Currently Amended) A product recombinant lactoferrin produced by the method of Claim 58.
- 62. The method of Claim 58, wherein said promotor is selected from the group consisting of alcohol dehydrogenase, argB, α -amylase, glucoamylase, and benA.
- 63. The method of Claim 58, wherein said linker sequence is selected from the group consisting of α -amylase, glucoamylase,, alcohol dehydrogenase and benA.
- 64. The method of Claim 58, wherein said linker sequence is selected from the group consisting of α -amylase, glucoamylase, and lactoferrin.

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Claims 65-68 Canceled.

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